





## **PAGER** Version 2

10.000

100,000

Created: 1 hour, 2 minutes after earthquake

1,000

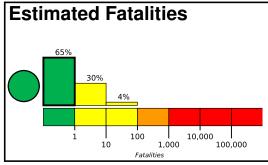
100

USD (Millions)

65%

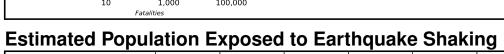
## M 4.1, 15km W of Searles Valley, CA

Origin Time: 2019-07-05 12:38:30 UTC (Fri 05:38:30 local) Location: 35.7720° N 117.5722° W Depth: 7.0 km



Green alert for shaking-related fatalities Estimated Economic Losses

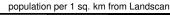
and economic losses. There is a low likelihood of casualties and damage.

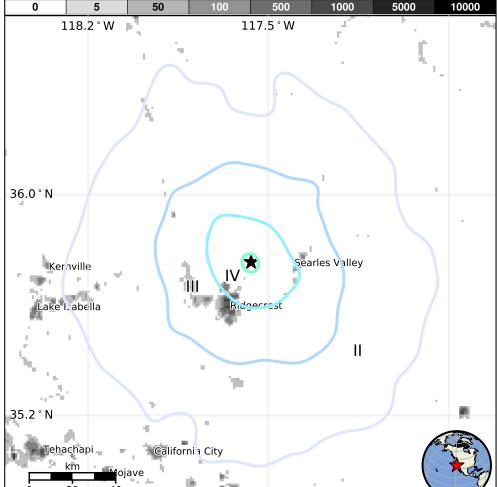


| ESTIMATED POPULATION<br>EXPOSURE (k=x1000) |                          | 86k*     | 44k    | 6k    | 0        | 0        | 0           | 0          | 0        | 0        |
|--|--------------------------|----------|--------|-------|----------|----------|-------------|------------|----------|----------|
| ESTIMATED MODIFIED MERCALLI INTENSITY      |                          | I        | 11-111 | IV    | V        | VI       | VII         | VIII       | IX       | X+       |
| PERCEIVE                                   | SHAKING                  | Not felt | Weak   | Light | Moderate | Strong   | Very Strong | Severe     | Violent  | Extreme  |
| POTENTIAL                                  | Resistant<br>Structures  | None     | None   | None  | V. Light | Light    | Moderate    | Mod./Heavy | Heavy    | V. Heavy |
| DAMAGE                                     | Vulnerable<br>Structures | None     | None   | None  | Light    | Moderate | Mod./Heavy  | Heavy      | V. Heavy | V. Heavy |

<sup>\*</sup>Estimated exposure only includes population within the map area.

## Population Exposure





**Historical Earthquakes** 

Overall, the population in this region resides in struc-

tures that are highly resistant to earthquake shaking, though some vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

| Date |            | Dist. | Mag. | Max        | Shaking |  |
|------|------------|-------|------|------------|---------|--|
|      | (UTC)      | (km)  |      | MMI(#)     | Deaths  |  |
|      | 1991-06-28 | 175   | 5.6  | VI(1,267k) | 1       |  |
|      | 2003-12-22 | 316   | 6.6  | VI(8k)     | 2       |  |
|      | 1971-02-09 | 169   | 6.6  | IX(21k)    | 65      |  |

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

## Selected City Exposure

**Structures** 

| from G | eoNames.org      |            |
|--------|------------------|------------|
| MMI    | City             | Population |
| IV     | Searles Valley   | 2k         |
| Ш      | Ridgecrest       | 28k        |
| Ш      | China Lake Acres | 2k         |
| Ш      | Inyokern         | 1k         |
| II     | Weldon           | 3k         |
| 1      | North Edwards    | 1k         |
| I      | California City  | 14k        |
| I      | Tehachapi        | 14k        |
| 1      | Fort Irwin       | 9k         |
| I      | Golden Hills     | 9k         |
| 1      | Alta Sierra      | 7k         |

bold cities appear on map.

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.